

# Manufacturer-Related Product Qualification

for railway rolling stock components

Certificate registration no.: 4902018A



Manufacturer

**Liberty Ostrava a.s.**  
**Vratimovská 689/117**  
**719 00 Ostrava-Kunčice**  
**Czech Republic**

Scope of qualification

Product group PG 2/Product	Manufacturing steps	Material group/category/remarks
wheels acc. DIN EN 13262 and DB BN 918 277	Continues Casting	Steelgrad A (ER7, ER8) Steelgrad B (ER9) Category 1
Wheel Center Acc. DB BN 918 279 und DB BN 918 277	Continues Casting	C1(C22), C2(C35), C3(C45)

Basis of qualification:

- Evaluation of manufacturing plant and the production processes: 03. - 04.06.2015
- Test reports: DB Systemtechnik GmbH:  
Report 18-55048-IGWSA-IB-9043-047 part 1 and part 2 from 14.09. and 04.10.2018  
Report 18-55351-T.I-IVP23-PR-0960 from 05.07.2018
- Final report no.: 051/04776/17 from 25.10.2018

Restrictions

- This qualification is only valid, if the conditions specified in our letter GS.EF42.HPQ from 25 October 2018 are being met.

Qualification valid until: **October 2024**

Deutsche Bahn AG  
Qualitätssicherung Beschaffung Schienenfahrzeuge und Schienenfahrzeugteile  
Produktqualifikationen FS.EF 42(1)

Berlin, 19 October 2019

K. Bismark

M. Burghardt

Nr. LgP	component	remark
<b>product group 1 – windscreens</b>		
340	End wall window, windscreen (inc. heating system)	
<b>product group 2 – wheelset components</b>		
450	Wheelset (complete)	
452	Monobloc wheel	
454	Wheel body	
455	Wheel tyre	
461	Axle with/without a central bore	
462	Axle with central bore / boring/drilling	
463	Molybdenum-coated wheelset / molybdenum coating	
<b>product group 3 – axle box bearings</b>		
468	Roller bearing for axlebox	
<b>product group 4 – axle box housings</b>		
466	Axle box housing, axle bearing housing	
<b>product group 5 - springs</b>		
390/419	Coil springs	
395/423	Laminated suspension spring (complete)/spring leaf (individual)	
<b>product group 6 – brake discs and hubs</b>		
1597-1	Friction rings and segments for brake discs	Raw part, unmachined
1597-2	Hub	
<b>product group 7 - housings</b>		
268	Coupler head/coupling head/coupling head housing/catcher	
800	Gearbox housing	
820	Traction motor housing	
843	Hollow drive shaft, hollow axle	
846	Hollow shaft casing	
850	Gearbox housing	
947	Brake shaft, Hollow brake shaft	
<b>product group 8 – draw hooks</b>		
300	Coupling hook	
<b>product group 10 – draw bars</b>		
308	Drawbar, forked drawbar	
<b>product group 11 – general components</b>		
171	Bracket/bearer/suspension system (power trans-mission between the running gear/truck and the vehicle body)	Vehicle body shell/body shell/vehicle body/structure, Welded-on parts, vehicle body fittings and structures
285	Central articulated joint, car body articulated joint	Buffing and draw gear, coupler
293	Components such as sleeves, plungers and buffer heads	Side/self-contained buffers, complete, crash buffers
295	Impact protection element (steel, reversible, e.g. annular springs, friction springs)	Buffing gear, Impact protection elements
372	Solebar, truck side member	
373	Crossbeam	Chassis/running gear/truck (complete), load-bearing structures
376	Suspension rod	
377	Truck bolster/beam	
378	Spring bracket, hollow shaft	
397	Spring suspension, spring bearing, spring guide	Load bearing structure of the secondary suspension stage
400	Spring hanger	
401	Spring bolt	
414	Wheelset bracket	
426	Beam, pneumatic spring bracket	Pneumatic spring system (complete)
444	Yaw damper bracket, rotation damper bracket	Rotation stabilization system, yaw stabilization system
447	Torsion shaft, torsion bar	Suspension, damping, wheel(set) mounting, Friction torque inhibitor elements
467	Casing sleeves	
469	Roller bearing components: inner raceway, outer raceway	Axle box complete (axle roller bearing, wheelset roller bearing)
484	Push-pull bar, link rod	
485	Coupling element/coupling rod	Running gear-vehicle body connection,
486	Tensile force articulation system housing	Articulation, tensile force articulation, lengthwise articulation
488	Truck stop block	
492	Truck pivot, central casting pins	
497	Central casting upper/lower	Truck pivot, central casting, slewing rim
498	Slewing rim	
501	Torsion bar (including level), torsion shaft	
502	Drawbar for torsion bar	Anti-roll system
503	Roll bar bearing	
509	Pendulum for torque support	Drehmomentstütze
531	Brake suspension system (e.g. from brake beam inter alia)	HPQ for components with a supporting/counter-bearing role,
532	Damper mounting brackets	Brackets, suspension systems (Running gear – fittings/auxiliary function)
544	Tilting crossbeam including suspension	
545	Suspension rod, tilting pendulum	
546	Ball-and-socket joint, articulated joint	Tilt system
547	Truck bolster	
548	Pendulum carrier, pendulum connection	
707	Supporting frame, supporting structure for generator, stator casing	Main generator system (traction generator)
821	Bearing shield: driven and non-driven end	Drive, traction motor, gearbox
836	Traction motor and drive suspension system pen-dulum	Traction motor suspension/drive suspension sys-tem (complete)
872	Connecting rod, coupling rod	
874	Torque dampers	Rod drive, chain drive
954	Brake guide	
955	Brake caliper/brake caliper lever	
956	Bracket	Brake actuating elements- Brake caliper unit
957	Housing	
958	Main suspension/mounting (pins, suspension bracket inter alia)	
961	Main suspension/mounting (pins, suspension lug, etc.)	
962	Lever	
963	Housing	Brake caliper unit
967	Brake drum	
978-2	Brake tie bar, brake flange, brake beam	
998	Integral beam	
999	Tragarm	Eddy-current magnet (complete)
1000	Track holder complete, retaining bracket	
1001	Brake support, braking force support, complete	
1005	Clamp, bracket	Eddy-current magnet - Suspension/lowering system (complete)
1008	Support frame	
1009	Trackholder (complete)	
1010	Trackholder head	Electromagnetic rail brake (complete)
1012	Pull bow, thrust bow	
1013	Driver, driver stem, driver stop	
1014	Suspension stand	
<b>product group 12 – general components with special testing</b>		
402	Spring shackle	
978-1	brake triangles	
969	Brake blocks	
304	Coupling pins, looped coupling links, coupling links, coupling nuts, coupling screws	Screw coupling
311	Coupling bolt	Drawbar, forked drawbar

